

09/943,190

CofC



Docket No.: M4065.0698/P698
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Letters Patent of:
Kristy A. Campbell et al.

Patent No.: 6,881,623

Issued: April 19, 2005

For: METHOD OF FORMING
CHALCOGENIDE COMPRISING
DEVICES, METHOD OF FORMING A
PROGRAMMABLE MEMORY CELL OF
MEMORY CIRCUITRY, AND A
CHALCOGENIDE COMPRISING DEVICE

Certificate
MAY 18 2005
of Correction

REQUEST FOR CERTIFICATE OF CORRECTION
PURSUANT TO 37 CFR 1.322

MS Post Issue
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Upon reviewing the above-identified patent, Patentees noted typographical errors which should be corrected.

In OTHER PUBLICATIONS:

On the cover page, please correct the following:

“D.B. Johnson, et al., “Lateral Diffusion in Ag-Be Thin-Film Couples”, Journal of Applied Physics, Vol. 40, No. 1, Jan. 1963, pp. 149-152” should read --D.B. Johnson, et al., “Lateral Diffusion in Ag-Se Thin-Film Couples”, Journal of Applied Physics, Vol. 40, No. 1, January 1969, pp. 149-152--.

“U.S. Appl. No. 09/778,963, filed Feb. 8, 2001, Moore” should read --U.S. Appl. No. 09/779,983, filed Feb. 8, 2001, Moore--.

The following two items should be inserted:

--U.S. Appl. No. 10/077,867, filed Feb. 20, 2002, Campbell et al.--

--U.S. Appl. No. 10/232,757, filed Aug. 29, 2002, Li et al.--

On page 2, column 2, please correct the following:

“Hirose, et al., “High Memory Behavior and Reliability in Amorphous As_1S_0 Film Doped with Ag”, Jul. 17, 1980, pp. K187-K190” should read --Hirose, et al., “High Speed Memory Behavior and Reliability of an Amorphous As_2S_3 Film Doped with Ag”, Jul. 17, 1980, pp. K187-K190--.

“Hirose, et al., “Polarity-dependent memory switching and behavior of Ag dendrite in Ag-photodoped amorphous As_1B_1 films”, Journal of Applied Physics, vol. 47, No. 6, Jun. 1976, pp. 2787-2772” should read --Hirose, et al., “Polarity-dependent memory switching and behavior of Ag dendrite in Ag-photodoped amorphous As_2S_3 films”, Journal of applied Physics, Vol. 47, No. 6, Jun. 1976, pp. 2767-2772--.

“Kluge, et al., “Silver photodifusion in amorphous Ga_1Se_1 ”, Journal of Non-Crystalline Solids 124 (1990) pp. 180-183” should read --Kluge, et al., “Silver photodiffusion in amorphous Ge_xSe_{100-x} ”, Journal of Non-Crystalline Solids 124 (1990) pp. 186-193--.

“Aron Technologies Corporation, Technology Description: *Programmable Metallization Cell (PMC)*, (pre-Jul. 7, 2000) pp. 1-5” should read --Axon Technologies Corporation, Technology Description: *Programmable Metallization Cell (PMC)*, (pre-Jul. 7, 2000) pp. 1-6--.

On page 7, column 1, please correct the following:

“Huggett et al.; *Development of silver sensitized germanium selenide photoresist by reactive sputter etching in SF₆*, 42 Appl. Phys. Lett., No. 7, pp. 592-594 (Apr. 1983)” should read --Huggett et al., *Development of silver sensitized germanium selenide photoresist by reactive sputter etching in SF₆*, 42 Appl. Phys. Lett., No. 7, pp. 592-594 (Apr. 1983)--.

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The errors were not in the application as filed by applicants or in the IDS's filed (copies attached); accordingly no fee is required.

Patent No.: 6,881,623

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Transmitted herewith is a proposed Certificate of Correction effecting such amendment. Patentees respectfully solicit the granting of the requested Certificate of Correction.

Dated: May 16, 2005

Respectfully submitted,

By 

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Registration No.: 52,499

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**UNITED STATES PATENT AND TRADEMARK OFFICE
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Page 1 of 3

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ISSUE DATE : April 19, 2005
INVENTOR(S) : Kristy A. Campbell et al.

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MAILING ADDRESS OF SENDER (Please do not use customer number below):

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APPLICANT: Kristy A. Campbell et al.

FILING DATE
August 29, 2001

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U.S. PATENT DOCUMENTS

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
my	AA	10/077,867	Campbell et al. (as filed)			02/20/2002
my	AB	10/232,757	Li, et al. (as filed)			08/29/2002
	AC					
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					Yes	No
AL						
AM						

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

my	AN	Owens et al., <i>Metal-Chalcogenide Photoresists for High Resolution Lithography and Sub-Micron Structures</i> , NANOSTRUCTURE PHYSICS AND FABRICATION, pp. 447-451 (Academic Press, 1989).
my	AO	Safran et al., <i>TEM study of Ag₂Se developed by the reaction of polycrystalline silver films and selenium</i> , 317 THIN SOLID FILMS, pp. 72-76 (1998).
my	AP	Shimizu et al., <i>The Photo-Erasable Memory Switching Effect of Ag Photo-Doped Chalcogenide Glasses</i> , 46 BUL. CHEM. SOC. JAPAN, No. 12, pp. 3662-3665 (December 1973).

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August 29, 2001GROUP
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	AR		D.B. Johnson, et al., "Lateral Diffusion in Ag-Se Thin-Film Couples", Journal of Applied Physics, Vol. 40, No. 1, January 1969, pps. 149-152.
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	AT		

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U.S. PATENT DOCUMENTS

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AA	09/797,835		Moore			03/01/2001
AB	09/732,968		Gilton			12/08/2000
AC	09/943,199		Campbell, et al.			08/29/2001
AD	09/943,187		Campbell, et al.			08/29/2001
AE	09/779,983		Moore			02/08/2001
AF	5,238,862	08/24/93	Blalock et al.			
AG	5,360,981	11/01/94	Owen et al.			
AH	5,761,115	06/02/98	Kozicki et al.			
AI	5,896,312	04/20/99	Kozicki et al.			
AJ	5,914,893	06/22/99	Kozicki et al.			
AK	6,084,796	07/04/00	Kozicki et al.			

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AS	Hirose, et al., "Polarity-dependent memory switching and behavior of Ag dendrite in Ag-photodoped amorphous As ₂ S ₃ films", Journal of Applied Physics, Vol. 47, No. 6, June, 1978, pps. 2767-2772.
AT	Kawaguchi, et al., "Optical, electrical, and structural properties of amorphous Ag-Ge-S and Ag-Ge-Se films and comparison of photoinduced and thermally induced phenomena of both systems", Journal of Applied Physics, 79, June 1996, pps. 9096-9104.

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AR		Kluge, et al., "Silver photodiffusion in amorphous Ge ₂ Se _{100-x} ", Journal of Non-Crystalline Solids 124 (1990) pps. 186-193.
AS		Kolobov, A.V., "Photodoping of amorphous chalcogenides by metals", Advances in Physics, 1991, Vol. 40, No. 5, pps. 625-684.
AT		Mitkova, et al. "Dual Chemical Role of Ag as an Additive in Chalcogenide Glasses", Physical Review Letters, Vol. 83, No. 19, pps. 3848-3851.

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AR	Mitkova, "Insulating and Semiconducting Glasses", Editor: P. Boolchand, World Scientific, New Jersey, 2000, pps. 813-843.
AS	Axon Technologies Corporation, TECHNOLOGY DESCRIPTION: <i>Programmable Metallization Cell (PMC)</i> , (pre-July 7, 2000) pp. 1-6.
AT	Shimakawa et al., <i>Photoinduced effects and metastability in amorphous semiconductors and insulators</i> , 44 ADVANCES IN PHYSICS No. 6, 475-588 (Taylor & Francis Ltd. 1995)

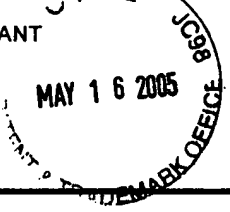
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*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
AA	5,789,277	08/04/98	Zahorik et al.	438	95		
AB	5,841,150	11/24/98	Gonzalez et al.	257	3		
AC	5,920,788	07/06/99	Reinberg	438	466		
AD	5,998,066	12/07/99	Block et al.	430	5		
AE	6,077,729	06/20/00	Harshfield	438	128		
AF	6,236,059 B1	05/22/01	Wolstenholme et al.	257	3		
AG	6,297,170 B1	10/02/01	Gabriel et al.	438	738		
AH	6,300,684 B1	10/09/01	Gonzalez et al.	257	774		
AI	6,316,784 B1	11/13/01	Zahorik et al.	257	3		
AJ	6,329,606 B1	12/11/01	Freyman et al.	174	260		
AK	6,348,365	02/19/02	Moore et al.	438	130		

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AN		Holmquist et al., <i>Reaction and Diffusion in Silver-Arsenic Chalcogenide Glass Systems</i> , 62 J. AMER. CERAMIC SOC., Nos. 3-4, pp. 183-188 (Mar.-Apr. 1979).
AO		Huggett et al., <i>Development of silver sensitized germanium selenide photoresist by reactive sputter etching in SF₆</i> , 42 APPL. PHYS. LETT., No. 7, pp. 592-594 (April 1983).
AP		Kawaguchi et al., <i>Mechanism of photosurface deposition</i> , 164-166 J. NON-CRYST. SOLIDS, pp. 1231-1234 (1993).

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ms	AN		West, DISSERTATION: <i>Electrically Erasable Non-Volatile Memory Via electrochemical Deposition of Multifractal Aggregates</i> , Arizona State University, pp. title page-168 (UMI Co., May 1998).
ms	AO		West et al., <i>Equivalent Circuit Modeling of the Ag₁As_{0.34}S_{0.36}Ag_{0.40}Ag System Prepared by Photodissolution of Ag</i> , 145 J. Electrochem. Soc., No. 9, pp. 2971-2974 (September 1998).
ms	AP		Yoshikawa et al., <i>A new inorganic electron resist of high contrast</i> , 31 APPL. PHYS. LETT., No. 3, pp. 161-163 (August 1977).

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